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CHICHILTICALLI.

BY

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Among the many extraordinary episodes of the Spanish conquest of America, the expedition of Coronado to the "seven cities" of Cibola and the province of Quivira is perhaps the most interesting one to the people of the United States. The story of an exploration 367 years ago, which covered 14 degrees of latitude and 18 of longitude; passed through the States and Territories now called Sinaloa, Sonora, Arizona, New Mexico, Oklahoma, Texas and Kansas; discovered the Rio Grande and the Colorado and the Grand Cañon of the latter, the Indian pueblo tribes, the Apache nation, and the buffalo of the great plains, and did all this in the short space of two years (1540-1542), must always have an intense charm for students of the early history of our country. the writer's purpose to repeat a relation which has been so well told by Simpson, Bandelier, Hodge, Winship, and others; the object of this paper being only the much-debated location of a point in Arizona, which forms a conspicuous landmark in the narratives of Coronado and his companions, the place named "Chichilticalli" or the "Red House."

When Friar Marcos de Niza returned in 1539 from his reconnoissance of Cibola, he represented (according to Coronado) that the place called Chichilticalli was situated at the head of the arm of the sea now known as the Gulf of California, about five leagues from the coast. Captain Melchior Diaz, who commanded the scouting party sent out from Culiacan over the friar's route in November of the same year, penetrated to the same locality, where he was

turned back by cold and snow. In 1540 Coronado rested there two days on his way to Cibola, and found it to be much further from the coast than the friar had reported. The historians of this expedition recorded these important facts,—that Chichilticalli marked a change from northwest to northeast in the direction of the march; that there the thorny vegetation ceased, and the pine-covered mountains began; and that the character of the inhabitants altered, the people in its vicinity being wild and savage, roaming over the country, and subsisting by hunting. In the entire length of the journey from Culiacan to Cibola, the only places noted as worthy of detailed description are the valley of the Hearts (Corazones) and Chichilticalli, the Red House. At the former, below the Señora river, a party was left to establish a depot of refuge in case of disaster, which was afterwards removed to a better location in the Suya valley, and then called the settlement of San Hieronymo. At Chichilticalli they had left the settled country, to enter on the deserted region, and begin the last and roughest stage of their journey to the "seven cities of Cibola."

In this paper it is taken for granted that the Cibola of Coronado is the "Old Zuñi" of the present day, situated in lat. 35° and long. 109° approximately. The great majority of critics agree on this as its location; including Gallatin, Squier, Whipple, Turner, Kern, Simpson, Hodge, Powell, Mindeleff, Haynes, Bandelier, and Cushing. The evidence of Espejo in 1583; and that of the Atlas Historique, Amsterdam, 1732; and Jefferys' Atlas, London, 1773, accord with this view.

CHICHILTICALLI THEORIES.

Mr. E. G. Squier¹² in 1848 located Chichilticalli north of the Gila river, between the meridians of 109° and 110°, in a locality which corresponds to the vicinity of the present Clifton, Arizona, but would require the direction of Coronado's march, thence to Cibola, to have been due north, instead of northeast, as stated in all the narratives. Mr. Squier identified the Nexpa river of the itinerary with the Gila.

Mr. R. H. Kern¹⁴ located Chichilticalli in long. 109° and below lat. 32° on his map made in 1853 for Schoolcraft. This corresponds to about the point where the El Paso and Southwestern Railroad crosses the boundary line between Arizona and New Mexico, about 30 miles southeast of Fort Bowie. Mr. Kern says that he assumed this position arbitrarily, but as correctly as possible from the data on hand.

Mr. Lewis H. Morgan¹⁵ in 1869 stated that "a comparison of the narratives tends to show that it was either upon the Gila or directly north upon the Salinas," and in a foot-note that "there is no ruin on the Gila at the present time that answers to this description," namely—that given by the chronicler Castañeda.

General J. H. Simpson¹⁶, an Engineer officer of the U.S. Army, in 1869, identified Chichilticalli with the Casa Grande ruin on the Gila river; and his verdict has been generally accepted by compilers like Bancroft, and writers of Arizona guide-books. Critical students of the original reports of the expedition of 1540 have not been satisfied with Simpson's argument, and have diligently sought for a more fitting location.

A. F. Bandelier¹⁹ endorses the objection made by Morgan (see above), and concludes that the true site must be looked for in the south-eastern corner of Arizona, within the quadrangle bounded by the San Pedro and Gila rivers, the western line of New Mexico, and the northern boundary of Sonora, practically returning to Kern's arbitrary location.

Geo. P. Winship¹⁸ locates the last stage of the march as following very nearly the line of the present road from the Gila to Fort Apache, implying that Chichilticalli was situated to the eastward of Old Camp Grant or in the vicinity of the Arivaypa cañon.

F. W. Hodge²², the editor of the American Anthropologist, concludes that the "route left the San Pedro in the vicinity of the present Benson, went through Dragoon and Railroad passes as the railroad does now, and reached the Gila at or near Solomonsville, in which vicinity was the much mooted Chichilticalli." Dr. Elliott Coues²² says that "this is the closest approximation ever made to the actual route, as it is also the most critical study of all that relates to the itinerary."

F. S. Dellenbaugh²⁰ disagrees with all the previous writers, and holds that Coronado crossed the Sierra Madre about the pass of Carretas in Sonora, and that the true site of Chichilticalli is probably not many miles from the Casas Grandes of Chihuahua. This theory has nothing to support it except one brief statement of direction in Castañeda's belated narrative, and is directly opposed to every other fact recorded in the history of the journey.

AUTHORITIES.

Among the contemporary authorities for the facts of Coronado's expedition, the only ones which specifically mention Chichilticalli are Castañeda', Jaramillo', and Coronado' himself in his letter

to the Viceroy Mendoza. The first-named did not accompany Coronado, but followed him with the main army, and says that he wrote his account of the expedition at Culiacan twenty years after the events; so his unsupported remarks about Coronado's feelings on seeing the ruined red house at Chichilticalli are not entitled to much weight as evidence. Jaramillo was a Spanish officer who did accompany Coronado's advanced party. His relation gives an itinerary of the march which is richer in topographical details than any other account, but makes no mention of a house or a ruin at Chichilticalli. Coronado mentions Chichilticalli several times in various important connections, but says nothing of a house or a ruin. These narratives are consulted most readily in their English translations by Geo. P. Winship, in the 14th Annual Report of the Bureau of Ethnology, which also contains the Spanish text of Castañeda's relation. Another authority, Mota-Padilla⁸, who wrote his History of New Galicia two centuries later, is quoted by Winship and by Bandelier, as he is supposed to have had access to some other independent and now unknown account of the expedition. The letters of the Viceroy Mendoza's to the King of Spain, and the anonymous Relacion del Suceso and Traslado de las Nuevas afford some indirect information of considerable value.

THE APPROACH TO CHICHILTICALLI.

The approach to Chichilticalli is best described in the words of the pioneers themselves. It is difficult to fix the site of the starting-point of this portion of the journey, the valley of the Hearts [Corazones], the narratives being vague as to its location. Jaramillo's account is as follows:

"The seventy horsemen who went with the General went in a northwesterly direction from this place [Culiacan]. . . . He pursued this direction, though with some twisting, until we crossed a mountain chain where they knew about New Spain, more than 300 leagues distant. To this place we gave the name of Chichilticalli, because we learned that this was what it was called from some Indians whom we left behind. . . . About two days were spent in this village of Hearts [Corazones]. . . . We went on from here, passing through a sort of gateway, to another valley very near this stream, which opens off from this same stream, which is called Señora. It is also irrigated, and the Indians are like the others. This valley continues for six or seven leagues, a little more or less. . . . From here we went on near this said stream, crossing it where it makes a bend, to another Indian set-

tlement called Ispa. . . . From here we went through deserted country for about four days to another river, which we heard called Nexpa. . . . We went down this stream two days, and then left the stream, going toward the right to the foot of the mountain chain in two days' journey, where we heard news of what is called Chichilticalli." [Winship's translation.]

Coronado's report' says that "the sea turns towards the west directly opposite the Hearts for 10 or 12 leagues," and that the people told him that this valley of the Hearts "is a long five days' journey from the western sea"; also that he "set out from the Hearts and kept near the sea coast as well as I could judge; but, in fact, I found myself continually further off."

Castañeda's account's says that the army under Arellano's command "reached a province which Cabeza de Vaca had named Hearts, because the people here offered him many hearts of animals. He [Arellano] founded a town here and named it San Hieronymo de los Corazones, . . . it was afterwards transferred to a valley which had been called Señora."

In another place he speaks of the Hearts as being "below the valley of Señora [abajo dell ualle de Señora]," which has been incorrectly translated "down the valley of Señora." Again he says that "from Señora to the valley of Suya is 40 leagues. San Hieronymo was established in this valley. . . . The people are the same as those in Señora, and have the same dress and language, habits and customs, like all the rest as far as the depopulated region [despoblado] of Chichilticale. Between Suya and Chichilticale there are many sheep and mountain goats, with very large bodies and horns."

In the *Relacion del Suceso*⁷ it is stated that "the best settlement of all is a valley called Señora, which is ten leagues beyond the Hearts, where a town was afterwards settled."

DESCRIPTION OF CHICHILTICALLI.

In Friar Marcos' report¹ there is no mention of Chichilticalli, either by name or description; but he must have spoken of it to Coronado, who states that the friar had said that the haven of Chichilticale was on the 35th degree of latitude, only five leagues from the sea, and that he [Marcos] had seen it. Castañeda⁶ says that Melchior Diaz (who commanded the small party sent forward in November, 1539, to verify the friar's statements) "went as far as Chichilticalli, which is where the wilderness begins, 220 leagues from Culiacan, and there they turned back, not finding anything important."

In Viceroy Mendoza's letter³ to the King, Chichilticalli is not named as having been mentioned in Diaz's report, but Mendoza says: "After going 100 leagues from Culuacan he began to find the country cold, with severe frosts, and the further he went on the colder it became, until he reached a point where some Indians he had with him were frozen, and two Spaniards were in great danger. Seeing this he decided not to go any farther until the winter was over."

Coronado says in his report*: "When I reached Chichilticalli I found that I was 15 days' distant from the sea." He mentioned no house nor ruin, and neither did Jaramillo, who accompanied him. Castañeda, who followed some time afterwards with the main army, says that the General "was much affected by seeing that the fame of Chichilticalli was summed up in one tumble-down house without any roof, though it appeared to have been a strong place at some former time when it was inhabited, and it was very plain that it had been built by a civilized and warlike race who had come from a distance. This building was made of red earth. . . . It was at the edge of the wilderness."

In another place he says: "Chichilticalli is so called because the friars found a house at this place [comarca, more properly "district"], which was formerly inhabited by people who separated from Cibola. It was made of coloured or reddish earth [era de tierra colorada o bermeja*]. . . The house was large, and appeared to have been a fortress. It must have been destroyed by the people of the district, who are the most barbarous people that have yet been seen. They live in separate cabins and not in settlements. They live by hunting. . . . At Chichilticalli the country changes its character again, and the spiky vegetation ceases. The reason is that the gulf reaches as far up [north?] as this place, and the mountain changes its direction at the same time as the coast. Here they had to cross and pass through the mountains in order to get into the level country."

If Castañeda had been present when Coronado reached Chichilticalli, his observations about the General being "much affected by seeing that the fame" of the place "was summed up in one tumbledown house without any roof" might have much weight; but as he was back with the main army, which did not reach Chichilticalli for some time after Coronado had passed on, this part of his story

^{*}Simpson¹6 quotes the French version thus: "La terre de ces pays est rouge," and this rendering is accepted by Bandelier (before the publication of the Spanish text)), who quotes it: "The soil of this region is red."

can be valued only as what he remembered (after 20 years) of some hearsay statement heard then or at some other time.

Jaramillo6, who was with Coronado, makes no mention of a house or a ruin, but says that "they heard news of what is called Chichilticalli" before arriving there; also, that after crossing a mountain chain "to this place we gave the name of Chichilticalli, because we learned that this was what it was called from some Indians." He also refers to it as the name of a mountain chain or a pass. Mota-Padilla, writing 200 years later, and evidently drawing on some other and now unknown source of information, says that "they went through a narrow defile (portezuela), which was named Chichilticalli, which means "Red House," because there was a house there plastered on the outside with red earth, There they found fir trees with fir cones full of called almagre. good meat. On the top of a rock lay skulls of rams with large horns, and some said they had seen three or four of these sheep, which were very swift-footed."

THE COUNTRY BEYOND CHICHILTICALLI.

Coronado says:

"I rested for two days at Chichilticale.... I entered the borders of the wilderness on St. John's eve, and for a change from our past labors we found no grass during the first days, but a worse way through mountains and more dangerous passages than we had experienced previously.... The way is very bad for at least 30 leagues and more through impassable mountains, but when we had passed these 30 leagues we found fresh rivers and grass.... There was a considerable amount of flax near the banks of one river, which was called on this account el Rio del Lino [Flax River]."

Jaramillo6, who travelled in Coronado's party, says as follows:

"Crossing the mountains we came to a deep and reedy river, where we found water and forage for the horses. From this river back at Nexpa, as I have said, it seems to me that the direction was nearly northeast. From here I believe that we went in the same direction for three days to a river which we called San Juan, because we reached it on his day. Leaving here we went to another river, through a somewhat rough country, more towards the north, to a river which we called the Rafts (de las Balsas), because we had to cross on these as it was rising. It seems to me that we spent two days between one river and the other, and I say this because it is so long since we went there that I may be wrong in some days,

though not in the rest. From here we went to another river, which we called the Slough (de la Barranca). It is two short days from one to the other, and the direction almost northeast. From here we went to another river which we called the Cold river (el rio Frio), on account of its water being so, in one day's journey; and from here we went by a pine mountain, where we found, almost at the top of it, a cool spring and streamlet, which was another day's march. . . . From here we went to another river called the Red river (Bermejo), two days' journey in the same direction, but less towards the northeast. . . . From here we came in two days' journey to the said village, the first of Cibola. . . . All the waterways we found, as far as this one at Cibola, and I do not know but what for a day or two beyond, the rivers and streams run into the South sea [the Pacific], and those from here on into the North sea [the Atlantic]."

Castañeda⁵, after describing Chichilticalli, says:

"From here they went on through the wilderness, and in 15 days came to a river about 8 leagues from Cibola, which they called Red river, because its waters were muddy and reddish. . . . The rest of the country is all wilderness (despoblado), covered with pine forests. . . . Watercress grows in many springs, and there are rose-bushes and pennyroyal, and wild marjoram. There are barbels and picones, like those of Spain, in the rivers of this wilderness. Gray lions and leopards were seen. The country rises continually from the beginning of the wilderness until Cibola is reached, which is 85 leagues, going north."

DISTANCES AND DIRECTION OF THE MARCH.

Castañeda⁶ says: "It is 220 leagues from Culiacan to the edge of the wilderness, and 80 (or 85) leagues across the wilderness [to Cibola], which makes 300 or perhaps 10 more or less" for the whole distance; also, that "Petatlan is 20 leagues from Culiacan, and it is 130 leagues from here to the valley of Señora," and that "from Señora to the valley of Suya is 40 leagues."

The Relacion del Suceso⁷ says: "The valley of Hearts is 150 leagues from the valley of Culiacan and the same distance from Cibola"; and in another place: "From the valley of Culiacan to Cibola it is 240 leagues in two directions. It is north to about the 34½th degree, and from there to Cibola, which is nearly the 37th degree, toward the northeast... In 73 days we reached Cibola."

Jaramillo repeatedly gives the direction from the Nexpa river to Cibola as northeast, except once rather towards the north for two

days. He reckons the journey by days, of which he specifies 40 in all, omitting them for two sections of the march, and giving 13 from the reedy river to Cibola. Coronado left Culiacan on April 22nd, 1540; arrived at the Hearts May 26th, entered the wilderness on St. John's Eve, June 23rd; crossed the San Juan river June 24th, and arrived at Cibola July 4th, according to Jaramillo, or July 7th, according to the *Traslado*; which would make a total of 77 days instead of 73, the time given in the *Relacion*.

The only statements which conflict with those stated above as to the direction are found in Castañeda, as follows:

"The country rises continually from the beginning of the wilderness until Cibola is reached, which is 85 leagues, going north. From Culiacan to the edge of the wilderness the way had kept the north on the left hand (el norte sobre el ojo isquierdo)."

This direction is certainly wrong, as it would have taken Coronado directly into the roughest part of the Sierra Madre, which he had tried to explore the previous summer, and from which he was forced to return. It would have brought him over to the eastern side of the cordillera, where he would cross streams flowing eastwardly, in direct opposition to all the facts given in the other narratives, including that of Coronado himself, written within a month after his arrival at Cibola. But the strongest objection to it is that it makes him abandon all opportunity of keeping touch with the ships which carried his stores, and that at the very beginning of his journey. Dellenbaugh's theory20 of the route is based upon the absolute truth of this one statement, and he ignores or minimizes the many other assertions which conflict with it. entirely ignores the fact, related by both Castañeda and Mendoza², that Coronado had tried to penetrate the country to the north of Culiacan in the previous year (1539), from which he was forced to return, having "found great scarcity of victuals there, and the mountains so craggy that he could find no way to pass forward."

He utterly ignores the positive statements of Friar Marcos and Coronado, that they followed the direction of the coast-line for 150 leagues or more; also, the course given by Jaramillo and the *Relacion*, which was northwest for three-fourths of the way and then northeast. He expresses his inability to understand the very clear and important observation by Jaramillo as to all the streams flowing to the South sea [the Pacific] as far as Cibola. Finally, his map does not agree with his text; the former showing the route as crossing the upper Yaqui just above Babispe, while the latter says

that it followed the Yaqui down for two days and then turned to the right to a range of mountains called Chichilticale.

DEDUCTIONS AND CONCLUSIONS.

It is impossible to reconcile the various details in the narratives, concerning either the route or the places mentioned, with our present knowledge of the country traversed. In trying to arrive at any conclusions it should be kept in mind that Castafieda did not travel with Coronado's party, and that he wrote his narrative twenty years after the time of the events; also, that Jaramillo frequently refers to the long period which had elapsed before he recorded his itinerary of the journey. On the other hand, the report of Friar Marcos, that of Diaz, as stated by Mendoza, and Coronado's letter, were written at the time when everything mentioned by them was of recent occurrence.

The only place-name along the line of march which has survived the three and a half centuries is that of the Señora valley, now called Sonora by a mere colloquial change of the word. Even the original position of the starting-point, Culiacan, has been lately disputed to the extent of a full degree of latitude. Mr. Squier12 identified the Nexpa river with the Gila, in that part of its course where it runs through the Pueblo Viejo valley in a northwesterly Morgan's map¹⁶ places the Corazones (Hearts) west of the headwaters of the Santa Cruz river, about on the line of the present boundary between Arizona and Sonora. Simpson¹⁶ located the Corazones at the town of Sonora (Hermosillo), on the river of the same name; and placed the settlement of San Hieronymo on what he calls the San Ignacio river, which his map shows to be the Rio del Altar. He identified the Nexpa with the present Santa Cruz river, and located the line of march down this stream and then across the desert parallel with the Santa Catalina range to the Casa Grande on the Gila above the Pima villages. Bandelier19 places the Corazones on the Yaqui river south of the present Batuco, locates the valley of Suya on a branch of the Sonora river north of the present Bacuachi, and expresses the opinion that Coronado followed the Sonora to its headwaters. Winship¹⁸ adopts this theory of the line of march, but says that the Nexpa may have been either the Santa Cruz or the San Pedro. Mr. Hodge22 identifies the Nexpa with the San Pedro, and maintains that the route left that river in the vicinity of the present Benson, reached the Gila at or near Solomonsville (in which vicinity he places Chichilticalli), crossed the head of the Gila Bonita and the Salt river, and

thus attained some of the headwaters of the Colorado Chiquito. Dellenbaugh²⁰ places the route still further east, in the difficult country drained by the eastern affluents of the Yaqui river, between the 109th meridian and the Sierra Madre, having crossed that range in the vicinity of the present Babispe, and hence to the Florida mountains in southwestern New Mexico. There Mr. Dellenbaugh at first located Cibola, but afterwards fixed it at a site near the upper Gila, perhaps in the vicinity of old Fort West.*

No one of these routes is in harmony with all the facts related by the historians of the expedition, and no combination of them can be made to fit the record. Dellenbaugh's is the least tenable of all, being supported, as I have already shown, by only one statement of direction in one of the relations, and opposed by every fact recorded in the other narratives. A critical study of the various accounts of the journey must leave some positive impressions on the mind of the student concerning the location of the principal places mentioned. After long acquaintance with the views and arguments which have been presented, and having had an extensive personal knowledge of much of the country involved, the writer has arrived at certain conclusions respecting the disputed points, which may be stated as follows:

The Route from Culiacan ran parallel to the coast-line, and as near thereto as was practicable for travel, for about 150 leagues in a nor'-nor'westerly direction; which was followed beyond the Corazones, then changed to north for several days, and finally to northeast for 15 days before reaching Cibola.

The Valley of the Hearts (Corazones) was somewhere in the lower course of the present Yaqui river. All the narratives agree in stating that this valley was reached before arriving at the Señora valley. The Relacion gives the distance between them as ten leagues, Jaramillo says that they were very near each other, and Coronado mentions his having sent from one to the other for corn. The expression in Castañeda that the Corazones valley was "abajo del ualle de Señora, should be rendered "below [i.e., south of] the valley of Señora," instead of "down the valley of Señora," as it is usually translated.

The Valley of Señora, called by Coronado the valley of the Señor [the Lord], was that now known by the name Sonora. Castañeda's description of its settlements leaves no room for doubt on this subject, and several of the names mentioned by him have continued there to the present day.

^{*} Romance of the Colorado River, New York, 1902, page 34.

The Valley of Suya was the final site of a Spanish settlement named San Hieronymo, which was first located in the Señora valley, but afterwards removed to Suya. There is no evidence that Coronado passed through it; on the contrary, Jaramillo, who marched with him, says very positively that they went up the Señora river, by a valley which continued for six or seven leagues to Ispa, perhaps the present Arispe. Bandelier places Suya up the Señora river north of the modern Bacuachi; Simpson located it on the San Ignacio river, which his map shows to be that now called the Rio del Altar. In view of Castañeda's statements that it was 40 leagues from Señora on a little river, and that one of the reasons for the discontent of its garrison was its location some distance from the main route, it is more than probable that it was on the stream now known as the Altar, where General Simpson placed it.

The Nexpa river, which has figured so prominently in the discussions of the probable route of Coronado through southern Arizona, is mentioned by only one of the historians, Jaramillo, whose narrative is not accessible in the original, but reaches us in an English translation of a faulty French version. It would be interesting to verify the statement that they marched "down" this stream, by reference to the Spanish text, which might bear the interpretation that they only followed the general direction of its If the line of march was up the Señora as far as possible, Coronado must have passed from the headwaters of that river, through beautiful though unpopulated country, directly to either the Santa Cruz or the San Pedro, both flowing northward in the general line of his route to Cibola. These two rivers are but a short distance apart, and there would be little reason ordinarily for choice between them. In Coronado's case, however, the Santa Cruz was to be preferred, as it lay nearer the coast, which he says he was striving to follow as near as he could judge, and it was probably a better settled stream than the San Pedro. scription given by Friar Marcos, of the large and fertile valley which he entered after passing four days in traversing a deserted mountain region, points to the valley of the Santa Cruz rather than to that of the San Pedro. Through this valley he "traveled five days' journey," it was "inhabited with goodly people, . . . well watered and like a garden," and the inhabitants requested him to stay there "three or four days, because that from this place there were four days' journey into the desert [unsettled country], and from the first entrance in the same desert unto the city of Cibola are fifteen great days' journey more."

According to Jaramillo, Coronado's party left the Nexpa after following it for two days, but he does not give any reason for their leaving the stream and striking out into a waterless desert. reason is perhaps to be found in the well-known fact that the Santa Cruz river "runs dry" in the vicinity of the present Tucson. Ross Browne¹⁷ found its bed absolutely dry at Revanton, 40 miles above Tucson, in the winter of 1863-64. If this was the reason, for their abandonment of the Nexpa (presuming that it was the Santa Cruz), they must have left the river about the locality of Tucson and traveled to the northeast for two days parallel to the Santa Catalina range. This direction would bring them to the Gila river in the vicinity of the mouth of Mineral creek, some 40 miles east of the ruin now called Casa Grande, where for the first time they would find high mountains lying directly across their route. Dellenbaugh identifies the Nexpa with the upper portion of the Yaqui river, where it runs north through an extremely rough Those who have read Captain Bourke's account21 of General Crook's campaign against the Apaches in this region will find it difficult to believe that Coronado marched by that route, or that Friar Marcos found there a valley "inhabited with goodly people, . . . well watered and like a garden."

From the country south of the middle Gila there are four old Indian trails across the mountains leading towards the pueblo cities in the north. The western one crosses the Pinal range along the line of "Stoneman's road" to the head of Pinto creek, a southern affluent of the Salt river. The second, farther east, leads up the valley of Mineral creek, then through a rough and boulder-strewn country to the head of the Pinto, where it joins the first-mentioned one. The third crosses the Gila above the mouth of the San Pedro, and passes over the southeastern shoulder of Pinal mountain to the head of Pinal creek, and thence keeps on high land towards the upper affluents of the Salt river. The fourth crosses the Gila above its first great cañon, and traverses the comparatively easy country of the San Carlos valley in a northeasterly direction, to join with the third-named about the point where the White and Black rivers unite to form the Salt river. These trails follow the lines of least resistance through the rough mountains, and are undoubtedly very old. Coronado may have entered the mountain region by any one of them, and if he came down the Santa Cruz he would naturally have taken either of the two westernmost ones. According to his own account he traversed a rough, high, timbered country for 30 leagues after entering the wilderness, and any of the three trails over the Pinal range would conform to his description of the route much better than that by way of the San Carlos valley. Any one of these three routes would bring him to the narrow valley of the upper Salt river, where the settlement of Livingstone is now located, though if he took the third he would have deviated down Pinal creek (a natural road at first), instead of keeping on the high ground directly to the mouth of the Black river.

Chichilticalli. The evidence as to the position of this important place is almost irreconcilable in many essential particulars, though definite enough in other respects. Nothing positive can be deduced from the distances or bearings, though it is remarkable how every such effort points to the zone lying south of the Gila river. For example, if we take the extreme distance given for the whole journey from Culiacan to Cibola, 300 leagues, and that from Chichilticalli to Cibola, 85 leagues; and assume that the westing up to Chichilticalli is balanced by the easting beyond that point (there being less than half a degree's difference in the longitudes of Culiacan and Cibola), we arrive at a position for Chichilticalli, which is at 72½ per cent. of the whole distance, counting from Culiacan. Applying this to the ten degrees of latitude between the two extreme points, the position of Chichilticalli would lie in about lat. 32° 15', corresponding to a line passing just north of Tucson, and through the station named Willcox, on the Southern Pacific Railroad. Using the lesser figures of the Relacion del Suceso, 240 and 50 leagues, and applying the same method, we arrive at lat. 32° 54', which cuts the San Pedro just south of its junction with the Gila. Taking the latitude of old Culiacan at 26°, where Dellenbaugh places it, and using the same method with the first-named figures, the latitude of Chichilticalli would lie in 32° 31', which is 23' south of the second result, and 16' north of the first one. Again, if we count backward from Cibola 85 leagues, and deduct one-third the distance for meandering in a rough country, we get 57 leagues (195 miles) in a straight line, which, applied to the map in a southwest direction from Zuñi, will bring the location of Chichilticalli about the junction of Arivaypa creek with the San Pedro river, the site of old Camp Grant. Such evidence is, however, of little value against that afforded by the description of the place itself and its surroundings.

It is in vain that we try to form any conclusion as to the site from the account of the waterways crossed north of Chichilticalli. Everywhere in that high region are found rivers flowing in deep barrancas, and streams of cold water one or two days' journey apart. Speculation may be freely indulged by giving modern names to the rivers mentioned in Jaramillo's itinerary of this part of the journey. In this connection it should be remembered that the word despoblado, applied to this section of the country by the Spanish narrators, and rendered "desert" in most of the English translations, means an unsettled or deserted region rather than a sterile one, and does not correspond at all with our idea of a desert. It is more correctly rendered "wilderness" in Winship's version of Castañeda's relation.

All the narratives agree in placing Chichilticalli on the border of this wilderness, and some of them give details which show conclusively that it lay within that border and not outside it in the country of the settled Indian tribes. According to both Castañeda and Mendoza the party under Melchior Diaz was turned back in 1530 at this place by cold and snow. Only two writers mentioned anything about a ruined house, and they wrote after twenty years and two centuries respectively; while Friar Marcos, Melchior Diaz, Coronado and Jaramillo said nothing about such a structure, and the latter refers to Chichilticalli as the name of a mountain or a Mota-Padilla said that it was approached through a narrow gate-way. It was certainly in those mountains which turned from their previous direction parallel with the route of march, and lay across the way, trending to the west like the coast of the gulf. Chichilticalli the cactus form of vegetation ceased, and was replaced by a mountain flora; the character of the natives changed from that of a settled, earth-tilling people, to a wild and savage race, which roamed over the country and lived by hunting. mountain sheep, seen in the vicinity; the rough country 30 leagues wide, containing many streams and fine timber, and the character of the Indians inhabiting it, unmistakably point to the conclusion that Chichilticalli was in the Apache country, and not in the region occupied by the settled tribes, through which the Spaniards had passed on their way thus far from Culiacan.

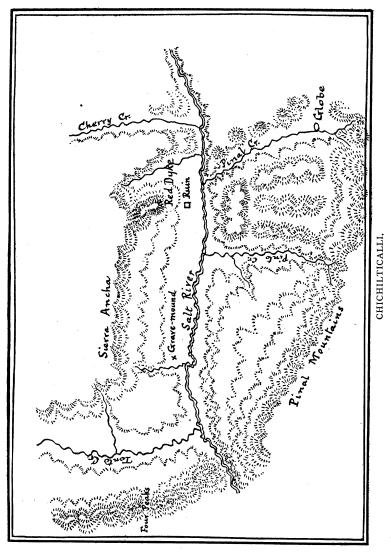
The Casa Grande near the Gila river does not suit any of the descriptions in the narratives. It is not in a mountainous, unsettled region, but stands on a settled plain, where from time immemorial the Pima Indians and their ancestors or predecessors have irrigated and cultivated the soil. It is not built of red earth, though it is possible that its walls may have been plastered with a reddish cement. It is not a single ruin, but one of several, of which no fewer than twelve were seen by Father Kühne¹⁰ (Kino),

157 years after the date of Coronado's journey, and one of the twelve was then (1697) in better condition than the main building, having in its lower room a ceiling "of round timbers, smooth and not thick, which appeared to be of cedar or savin." As late as 1852, Commissioner Bartlett saw three buildings, two of which were more ruined than the central one. The thorny vegetation does not end at Casa Grande, but covers the plain and foothills beyond on the northern side of the river. It is not in the vicinity of pine-clad mountains, and is not approached by any sort of a gate-way. It stands upon a hot, arid plain, extending in every direction for many miles, and bearing a vegetation which includes the various thorny cacti and other desert plants.

THE POSSIBLE SITE OF CHICHILTICALLI.

Chichilticalli undoubtedly received its name from something connected with the idea of a "red house," that being the meaning of the words *Chichiltic calli* in the Aztec language. It was probably so called by some of the Mexican Indians who accompanied Friar Marcos in his first journey to Cibola. Just where or what it was no one can yet say positively, but I offer the following contribution to its identification, based on my personal knowledge of the district involved.

In one day's journey north from the Gila river, going over the Pinal range by either of the two trails first above mentioned, the traveller on horseback reaches the upper valley of the Salt river, a narrow basin some 15 miles long, in which the main stream receives the Tonto creek from the north and the Pinto creek from the south. This valley is now settled by American farmers but will soon be occupied largely by an immense reservoir formed by a dam now being built by the Government at its lower end. Before General Crook's campaign against the Pinal and Tonto Apaches in 1872, it was the centre of the region inhabited by those Indians; and in it were the main trails used by the cavalry expeditions which operated from Camp McDowell and old Camp Grant into the country known as the Tonto Basin. Approaching this valley from the south, on the road which runs along the divide between the Pinto and Pinal creeks, the traveller sees a magnificent panorama spread out before his eyes. To the left opens the head of the dark cañon of Salt river, north of which extends the majestic, granite-ribbed Mazatzal range, crowned by "four peaks," which rise to a height of 8,000 feet above the plain. Directly in front is seen the broad summit of the pine-covered Sierra Ancha, its southeastern extremity projecting over the valley as a great dyke of red rock, with projecting angles and recesses showing as the immense doors and windows of a castellated "red house," especially when the western



sun throws their shadows on its face. In the year 1868 the writer was doing topographical work for the U. S. Engineer Department, in this region, with a scouting party commanded by Major A. J. Alexander of the 8th Cavalry. During a noon-time halt in this

valley he found a grave mound, from which with slight effort he disinterred some remarkable relics in a greatly decayed condition; including human bones, an ancient saddle, which was very high in the pommel and cantle, pieces of hair rope, and the metallic parts of spurs and a bridle. At that time General Simpson's paper on the Coronado expedition had not been published, but the officers present agreed that the articles were of more ancient type than any Mexican or American horse equipments then known, and the suggestion was made that they might be relics of Coronado's army. In the following year, 1869, when returning from a scouting expedition in the country east of Cherry Creek, we entered this valley at its upper end, and soon afterwards deviated from the usual trail to follow some fresh Indian sign. While returning to the trail we came across a mound on the mesa, which, on examination, proved to be the ruin of a large building. Our business there was Apachehunting; we were returning from an extended scout with short rations, and had a long journey to make before reaching our supply station, Camp McDowell, and nothing but hostile Indians would have influenced the commanding officer to stop for any length of time. For these reasons no detailed examination of the ruin could be made, but it left a strong impression on my mind, and I recollect writing a short account of it for the Smithsonian Institution to be forwarded through military channels. route-sketch, which accompanied the official report of the expedition, this place was marked "ruins," and the sketch was duly incorporated in the War Department maps of that country. ruin stood on the mesa, about half-way between the Salt river and the great red dyke; but other ruins were subsequently found on higher ground, closer to the red mountain. In the opposite direction, half way up the hills enclosing the southwestern end of the valley, a large cliff-house, several stories high, can be seen by the naked eye from almost any position on the river.

On another occasion, in 1869, the writer accompanied a large body of cavalry under the command of Brevet Lieut.-Colonel Geo. B. Sanford, Captain 1st Cavalry, through the Pinal range. We went up Pinal creek and over the mountains to old Camp Grant, thence back across the Gila river, up Mineral creek, and over the range again to the Pinto, where we had a fight with Apaches, and then moved down to the Salt river. As we emerged from the lower cañon of the Pinto (perhaps the very gateway mentioned by Mota-Padilla), we saw to our right front the great red dyke of the Ancha range, glowing in the evening sun, which cast dark shadows as

doors and windows upon the vast mass of red rock, giving to it the very similitude of an enormous red castle. I have never forgotten the scene, and, in after years, when familiar with the story of Coronado's march, I felt that this may have been the "red house" which is so often mentioned in the Spanish narrations. It is possible, I will not say probable, that in this great dyke of red rock we have the original Chichilticalli. One who has ever seen it and noticed its resemblance to a great red castle, can easily imagine the Indian companions of Friar Marcos emerging from the gateway of the Pinto into the valley, as the western sun cast deep door-like shadows from projecting crags on the rocky face of the great red dyke, and calling out in their own language "Chichiltic calli!" ["red house!"] as they pointed to the gigantic red rock. name would continue among them as the designation of a locality to be associated twenty years afterwards by Castañeda with the recollection of some ruin seen in the vicinity, perhaps the cliffdwelling above mentioned, or some other structure made of the red débris lying at the base of the original "red house."

This locality lies directly on Coronado's route, as mapped by Morgan and Simpson. From it towards the Zuñi pueblos the trail passes over high, rolling, grassy country, with pine timber on the higher ranges; and crosses many tributaries of the Salt river, corresponding as to their intervening distances with the streams mentioned by Jaramillo. It is now of easy access from the end of the railroad at Globe, some 25 miles away, by a good road down Pinal creek to the head of the box cañon of that stream; thence up a dry wash to the summit of the divide between the Pinal and the Pinto, and down to the Salt river along a sharp ridge between deep, dry washes in the foothills. It must be familiar to the officers of the irrigation service who have been working on the Roosevelt dam, or surveying the watershed of the upper Salt river. A photograph taken in the late afternoon, from any high point on the Globe road above Livingstone, would show the remarkable castlelike appearance of this great red dyke, which may have been the Chichilticalli of the Spanish pioneers.

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